Discussion Questions

• How will a shift in fuel type and to autonomous vehicles impact transportation budgets?
• What can cities and states do to prepare for a shift in technology?
• What data and information do researchers need to monitor shifts in technology?
Urbanism Next

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Parameters / Inputs

- Role of Transit (and Ridesourcing)
- Fleets vs. Individual Ownership
- Cost of AV’s
- E-Commerce and Deliveries
- General Desire for Proximity / Open Space
Autonomous Vehicle Revenue Implications for Portland, Tigard, and Tualatin

Category: Mobility
Term: Fall 2017
Professor: Rebecca Lewis
Partner Lead: Eric Hesse, TriMet

PURPOSE
Examine the impact of autonomous vehicle technology on the respective budgets of Portland, Tigard, and Tualatin and identify new revenue options with the advent of urban mobility.

PROCESS
Students researched and analyzed transportation revenue funding, developed baseline operating costs as a result of shifting technology, and generated innovative revenue options to meet the anticipated revenue gap due to shifting technology.

RESULTS
Students developed funding packages combining creative new funding solutions with traditional revenue sources. The most common new funding solution was a Vehicle Miles Traveled (VMT) tax and the most common traditional revenue source was restructuring or increasing vehicle registration fees. Selected recommendations include:
- Cordon pricing
- Pick-up and drop-off zones
- Mobile business tax
- Electric vehicle charging stations
Transportation Revenue Sources

- Transportation Utility Fee
- General Fund
- Impact Fees
- Parking
Transportation Revenue Impacts

- Gasoline Taxes
- Vehicle Registration Fees
- Traffic and Parking Citations
- Vehicle Impounding Fees
- Parking Revenue

10% - 25%

Transportation Revenues Impacts *(Based on analysis using Fagnant and Kockelman 2015)*
AV Revenue Opportunities (previously discussed)

- Vehicle Miles Traveled (VMT) Fees
- Cordon Pricing
- On/Off Ramp Fees
AV Revenue Opportunities (new)

- Empty Seat Tax
- Fleet Parking Fees
- Use of Curb Access
- GPS and Data Fees
- Electricity Fees
- Charging Stations
- Advertisement Tax
- Mobile Business Tax

Credit: Rebecca Lewis, University of Oregon
Indirect Transp. Related Fiscal Impacts

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Considerations for Revenues

- Fuel source (EVs) -> gas taxes
- Shared v. private -> licensing fees
- Shared vehicles -> parking
- Free up land from parking -> property tax collection
- Increasing VMT -> road usage charges or cordon pricing
- Advertising -> ??
- Empty seats -> ??
- E-commerce/mobile businesses -> ??